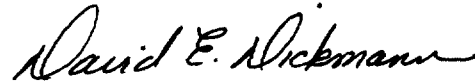


encompasses a total land area of approximately 43 square kilometers in which an estimated 1,265 persons reside.

Environmental Considerations

The proposed facility was evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65. "Evaluating

specified under 47 CFR 1.1307(a)(1)-(7), is not expected to require high intensity lighting under 47 CFR 1.1307(a)(8), and the potential for human exposure to radiofrequency radiation is predicted to be within the standards specified in 47 CFR 1.1307(b).



David E. Dickmann

November 14, 1991

TECHNICAL EXHIBIT  
APPLICATION FOR FM CONSTRUCTION PERMIT  
LLOYD SANTIAGO-SANTOS AND  
LOURDES RODRIGUEZ BONET  
CULEBRA, PUERTO RICO  
CH 293A      6 KW      25 M

Technical Specifications

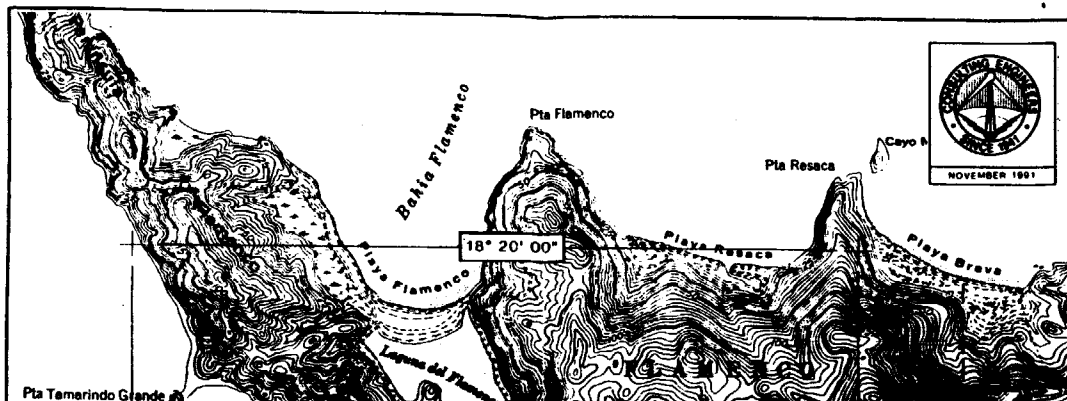
Channel	293A
Frequency	106.5 MHz
Site coordinates	18° 18' 12" North Latitude 65° 18' 09" West Longitude
Site elevation above mean sea level	2 m
Average elevation above mean sea level of standard eight radials 3-16 kilometers	14 m
Overall height of proposed antenna structure with beacon	
Above ground	41 m
Above mean sea level	43 m
Height of FM antenna radiation center	
Above ground	37 m
Above mean sea level	39 m
Above average terrain	25 m
Transmitter	*Continental, type 814B
Maximum rated power output	5 kW
*Or equivalent	

Transmission line	*Andrew, type LDF7-50A
Nominal diameter	4.13 cm (1-5/8 in)
Length	30 m
Efficiency (0.23 dB loss)	94.9%
Antenna	*Shively, type 6813
Number of bays	3
Input power rating	9 kW
Polarization	Circular
Power gain	
Horizontal polarization	1.55
Vertical polarization	1.55

Proposed Operation

Transmitter output power	4.08 kW
Transmission line loss	0.21 kW
Antenna input power	3.87 kW
Effective radiated power	
Circular polarization	6 kW

\*Or equivalent



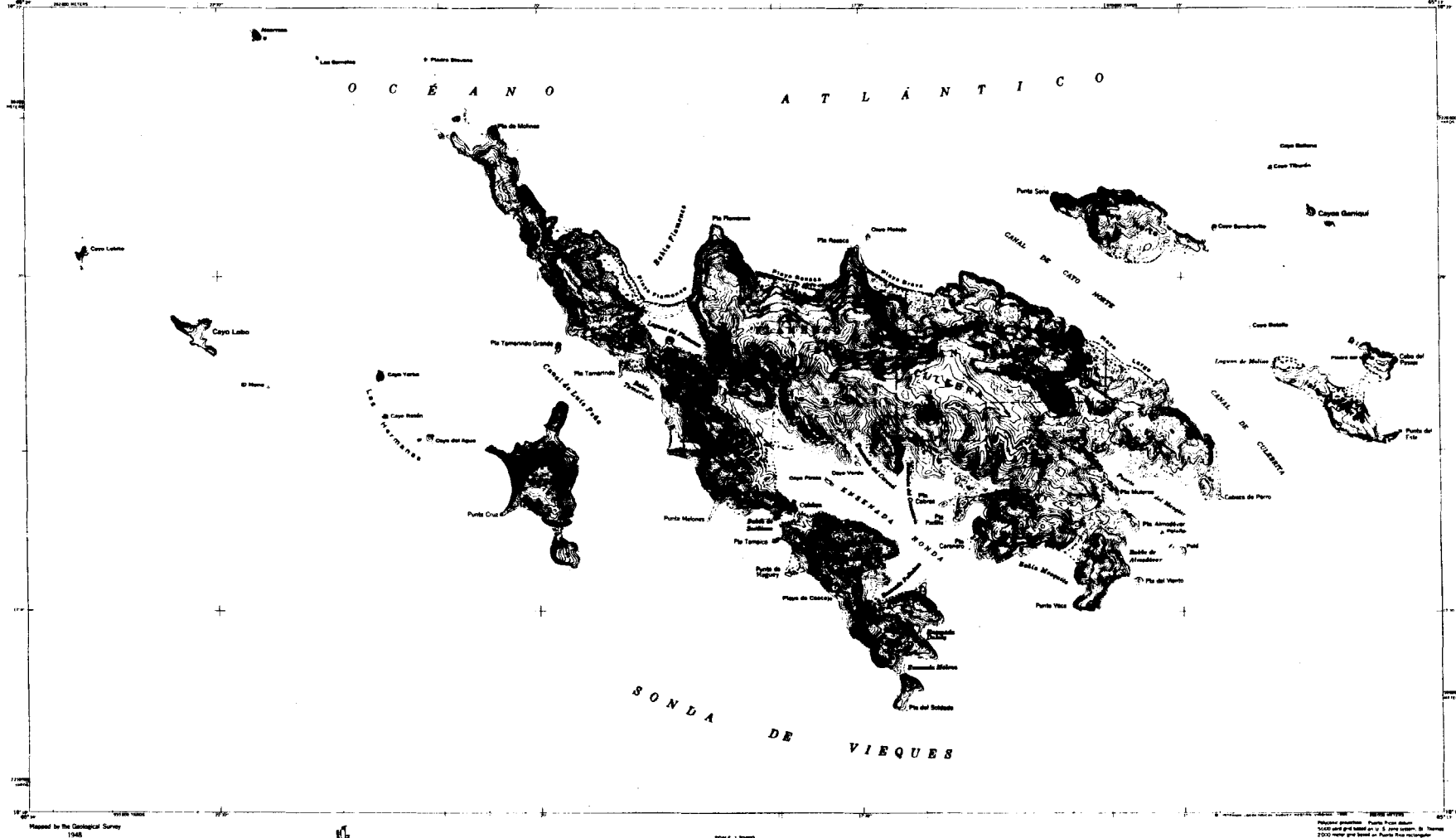
CULEBRA AND ADJACENT ISLANDS. P. R.  
N1816—W6513/6x11

1948

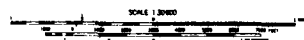
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

UNITED STATES  
DEPARTMENT OF THE NAVY  
HYDROGRAPHIC OFFICE

PUERTO RICO  
CULEBRA AND ADJACENT ISLANDS



Map made by the Geological Survey  
1948



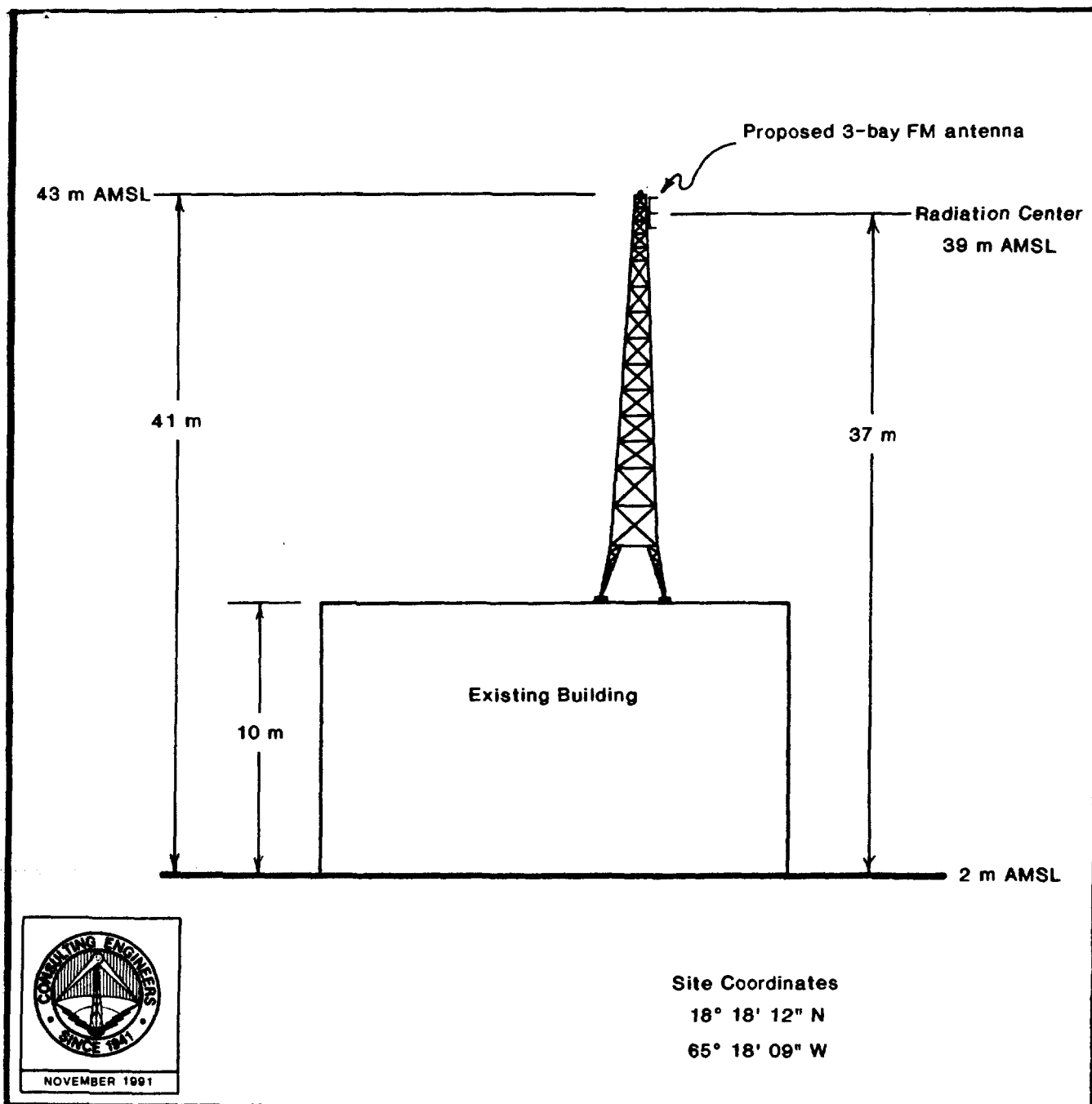
Contour interval 500 feet  
A surface represented by dashed lines  
Labeled to mean sea level

CULEBRA AND ADJACENT ISLANDS P. R.  
N 1816-10513-5a11

1948

FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
AND DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, SAN JUAN, P. R. 00916  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Figure 3



## PROPOSED ANTENNA AND SUPPORTING STRUCTURE

LLOYD SANTIAGO-SANTOS  
AND LOURDES RODRIGUEZ BONET  
CULEBRA, PUERTO RICO  
CH 293A 6 KW 25 M

du Treil, Lundin & Rackley, Inc. Washington, D.C.

Figure 4

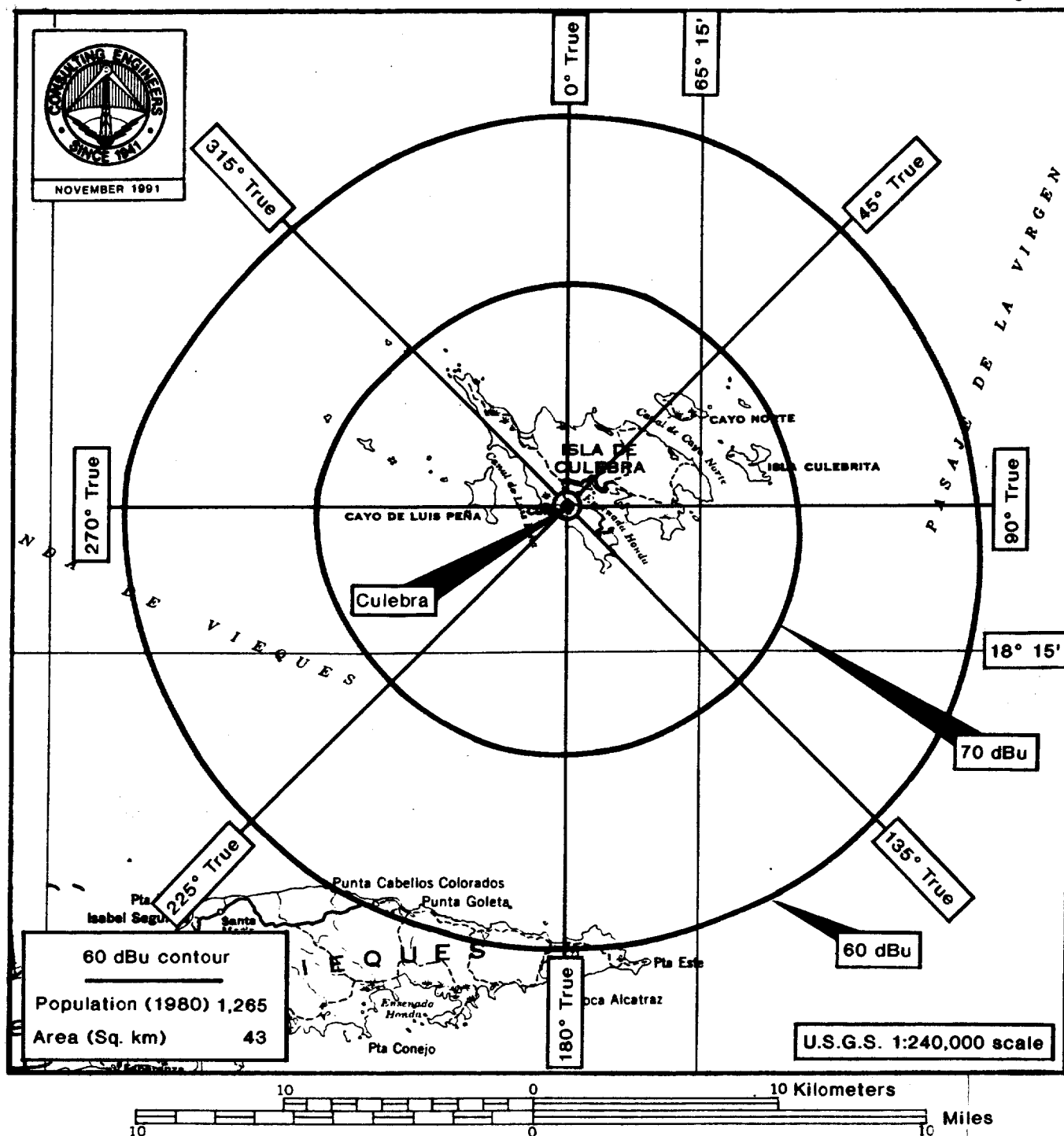
**TECHNICAL EXHIBIT**  
**APPLICATION FOR FM CONSTRUCTION PERMIT**  
**LLOYD SANTIAGO-SANTOS AND**  
**LOURDES RODRIGUEZ BONET**  
**CULEBRA, PUERTO RICO**  
**CH 293A      6 KW      25 M**

Tabulation of Average Elevations  
and Distances to Coverage Contours

Radial Bearing (deg. T.)	3-16 Kilometer Average Terrain Elevation (meters AMSL)	Antenna Height Above Average Terrain (meters)	<u>Distance to Contour</u>	
			70 dBu (km)	60 dBu (km)
0	38	1	8.9	15.8
45	31	8	8.9	15.8
90	5	34	9.5	16.8
135*	0	39	10.1	18.0
180	0	39	10.1	18.0
225	0	39	10.1	18.0
270	1	38	10.0	17.8
315	<u>26</u>	<u>13</u>	8.9	15.8
Average	14	25		

\*Not included in calculation of average values per  
47 CFR 73.313(d) (2) (i).

Figure 5



## PREDICTED COVERAGE CONTOURS

LLOYD SANTIAGO-SANTOS  
AND LOURDES RODRIGUEZ BONET  
CULEBRA, PUERTO RICO  
CH 293A 6 KW 25 M

duTreil, Lundin & Rackley, Inc. Washington, D.C.

Figure 6

**TECHNICAL EXHIBIT**  
**APPLICATION FOR FM CONSTRUCTION PERMIT**  
**LLOYD SANTIAGO-SANTOS AND**  
**LOURDES RODRIGUEZ BONET**  
**CULEBRA, PUERTO RICO**  
**CH 293A          6 KW          25 M**

Allocation Study

Call Status	City State	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-Tru	Dist. (km)	Req. (km)
WVIS CP	Christiansted VI	BPH910627JF	291B 106.1	50. 288.0	17-44-51 64-50-11	141.4	78.88	69
WVIS LIC	Christiansted VI	BLH870114KB	291B 106.1	9.0 272.0	17-44-51 64-50-11	141.4	78.88	69
WNIKFM LIC	Arecibo PR	BLH2953	293B1 106.5	19.5 .0	18-28-28 66-43-40	277.4	151.81	143
WMEG LIC	Guayama PR	BLH830628AK	295B 106.9	25.0 594.0	18-06-48 66-03-07	255.2	82.03	69
WVGN LIC	Charlotte Amalie VI	BLH850331KF	296A 107.1	1.35 467.0	18-21-33 64-58-18	79.9	35.52	31

**SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

1. Does the applicant propose to employ five or more full-time employees?

☐ Yes ☒ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 996-A).

**SECTION VII - CERTIFICATIONS**

1. Has or will the applicant comply with the public notice requirement of 47 C.F.R. Section 73.3560?

☒ Yes ☐ No

2. Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section V of this form, as the location of its transmitting antenna, will be available to the applicant for the applicant's intended purpose?

☒ Yes ☐ No

Exhibit No.  
DNA

If No, attach as an Exhibit, a full explanation.

3. If reasonable assurance is not based on applicant's ownership of the proposed site or structure, applicant certifies that it has obtained such reasonable assurance by contacting the owner or person possessing control of the site or structure.

Name of Person Contacted

Joseph G.A. Fournier

Telephone No. (include area code)

(809) 742-0173

Person contacted: (check one box below)

☒ Owner

☐ Owner's Agent

☐ Other (specify)

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

SECTION VI - CERTIFICATION (Page 5)

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT.  
U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are